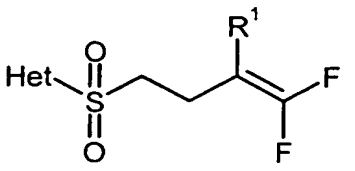
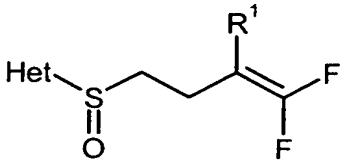
What is claimed is:

1. A proces for preparing compounds of the formulae (I) and (II)

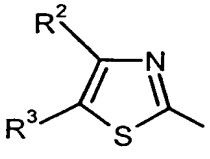

(I)

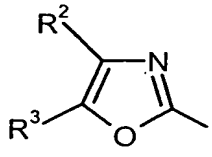

(II)

where

R^1 is hydrogen or fluorine, and

Het is a heterocycle from the following group of heterocycles


(A)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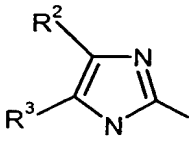
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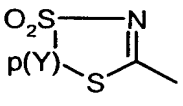
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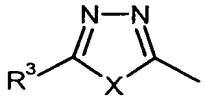
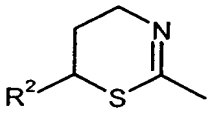
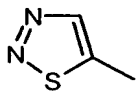

(E)


(F)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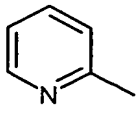
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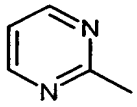
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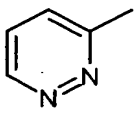
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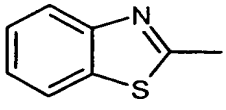
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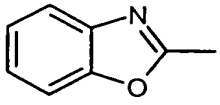
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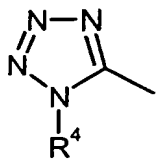


(N)

where

R^2 is hydrogen, halogen, C_1-C_4-alkyl or C_1-C_4-haloalkyl,

R^3 is hydrogen, halogen, and also optionally halogen-, methyl-, ethyl-, n- or i-propyl- or n-, i-, s- or t-butyl-, methoxy-, ethoxy-, n- or i-propoxy- or n-, i-, s- or t-butoxy-substituted C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-alkylthio, C_1-C_4-alkylsulfinyl, C_1-C_4-alkylsulfonyl, C_1-C_4-alkoxycarbonyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_1-C_4-alkylthio-C_1-C_4-alkyl, carboxyl, C_1-C_4-alkylaminocarbonyl, C_3-C_6-cycloalkylaminocarbonyl, C_1-C_4-dialkylaminocarbonyl, C_2-C_4-alkenyl, C_2-C_4-alkenylthio, C_2-C_4-alkenylsulfinyl or C_2-C_4-alkenylsulfonyl,

R^4 is C_1-C_8-alkyl, C_2-C_6-alkenyl, C_1-C_4-haloalkyl, C_1-C_4-alkoxy-C_1-C_4-alkyl, C_1-C_4-alkylthio-C_1-C_4-alkyl, C_3-C_8-cycloalkyl or optionally halogen-, C_1-C_4-alkyl-, C_1-C_4-alkoxy-, C_1-C_4-alkylthio- or C_1-C_4-haloalkyl-substituted phenyl or benzyl,

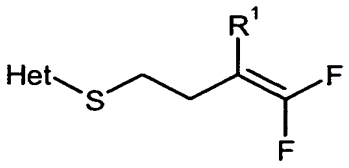
p is 1, 2 or 3,

X is oxygen or sulfur, and

Y is optionally singly or doubly, identically or differently substituted methylene, and examples of substituents include: in each case optionally halogen-, C_1-C_4-alkoxy-, C_1-C_4-alkylthio-, C_1-C_4-haloalkoxy- or C_1-C_4-haloalkylthio-substituted C_1-C_4-alkyl,

C_2-C_4-alkenyl or C_2-C_4-alkynyl, and also optionally singly to triply, identically or differently substituted phenyl, and examples of substituents include: halogen, cyano, nitro, C_1-C_4-alkyl, C_1-C_4-alkoxy, C_1-C_4-alkylthio, C_1-C_4-haloalkyl, C_1-C_4-haloalkoxy or C_1-C_4-haloalkylthio,

by allowing a compound of the formula (III)



(III)

where

R^1 and Het are each as defined above

to react with a salt of peroxomonosulfuric acid, H_2SO_5,

optionally in the presence of a reaction assistant and optionally in the presence of a diluent.

2. The process for preparing compounds of the formula (I) as per claim 1, characterized in that compounds of the formula (II) as per claim 1 are allowed to react with a salt of peroxomonosulfuric acid, H_2SO_5, optionally in the presence of a reaction assistant and optionally in the presence of a diluent.

3. The process as per claim 2, characterized in that the process is carried out at a pH of from 6 to 10.

4. The process for preparing compounds of the formula (II) as per claim 1, characterized in that compounds of the formula (III) as per claim 1 are

allowed to react with a salt of peroxomonosulfuric acid, H_2SO_5, optionally in the presence of a reaction assistant and optionally in the presence of a diluent.

5. The process as per claim 4, characterized in that the process is carried out at a pH of from 1 to 3.

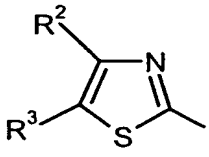
6. The process as per one of claims 1 to 5, characterized in that the salt of peroxomonosulfuric acid is potassium hydrogenperoxomonosulfate ($2\ KHSO_5 \cdot KHSO_4 \cdot K_2SO_4$ (5:3:2:2)), preferably Oxone® or Caroat®.

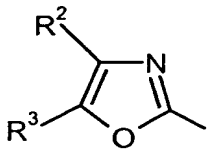
7. The process as per one of claims 1 to 6, characterized in that the reaction is carried out at a temperature of from –20°C to 150°C.

8. The process as per one of claims 1 to 7, characterized in that

R^1 is fluorine,

Het is a heterocycle from the following group of heterocycles


(A)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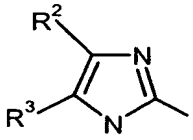
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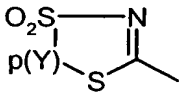
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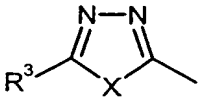
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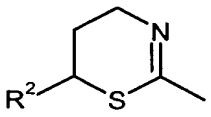
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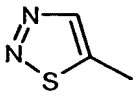
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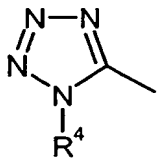

(N)

R^2 is hydrogen, fluorine or chlorine,

R^3 is hydrogen, fluorine, chlorine, and also optionally fluorine-, chlorine-, methyl-, ethyl-, n- or i-propyl- or n-, i-, s- or t-butyl-, methoxy-, ethoxy-, n- or i-propoxy- or n-, i-, s- or t-butoxy-substituted methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, n-, i-, s- or t-butoxycarbonyl, methoxymethyl, methoxyethyl, ethoxymethyl, ethoxyethyl, methylthiomethyl, methylthioethyl, ethylthiomethyl, ethylthioethyl, carboxyl, methylaminocarbonyl, ethylaminocarbonyl, n- or i-propylaminocarbonyl, cyclopropylaminocarbonyl, cyclobutylamino-carbonyl, cyclopentylaminocarbonyl, cyclohexylaminocarbonyl, dimethylaminocarbonyl, diethylaminocarbonyl, ethenyl, propenyl or butenyl,

R^4 is preferably methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, tert-butyl, n-pentyl, cyclopropyl, cyclopentyl, cyclohexyl, 2-chloroethyl, 2,2,3,3,3-pentafluoropropyl, 2,2,2-trifluoroethyl, 3-bromopropyl, 2-methoxyethyl, 2-ethoxyethyl, 2-methylthioethyl, allyl, 2-butenyl or in each case optionally singly or doubly, identically or differently fluorine-, chlorine-, bromine-, methyl-, ethyl-, isopropyl-, trifluoromethyl-, methoxy- or methylthio-substituted phenyl or benzyl,

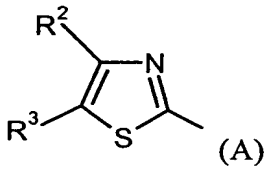
p is 1 or 2,

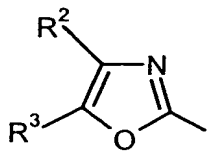
X is oxygen, and

Y is optionally singly or doubly, identically or differently substituted methylene, and examples of substituents include: methyl, ethyl, or optionally singly or doubly, identically or differently substituted phenyl, and examples of substituents include: fluorine, chlorine, methyl, methoxy, trifluoromethyl, cyano or nitro.

9. The process as per one of claims 1 to 8, characterized in that

Het is a heterocycle from the following group of heterocycles


(A)

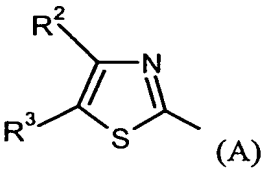

(B)

R^2 is hydrogen , and

R^3 is hydrogen, fluorine or chlorine.

10. The process as per one of claims 1 to 9, characterized in that

Het is the following heterocycle


(A)

R^2 is hydrogen , and

R^3 is chlorine.